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## A STUDY ON ATHLETIC PERFORMANCE OF SCHOOL GOING STUDENTS

**Ajit Das\***

*Assit. Teacher, Matikole Vidyamandir, Rabindranagar, Kolkata- 700065, West Bengal, India*

*\*Corresponding Author Ph: 33-25660073; Email: [ajit\\_das075@yahoo.co.in](mailto:ajit_das075@yahoo.co.in)*

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**ABSTRACT:** The purpose of the study was to find out the athletic performance of school level athlete. The study was confined to the age group of 14 -16 years, 54 boys and 54 girls from the record book of Bidhan Nagar sub-division sports association of district of North 24 Parganas of the state in West Bengal were selected for the purpose. The study was to compare the performance among the men athletes and among the women athletes of three consecutive years (2010, 11 and 12) and also the trend of performance. The criterion measure adopted in this study were speed (time taken to cover contain distance), strength of muscles (distance covered in jumping and throwing), explosive leg strength (height attained in high jumps). Mean and standard deviation were used as descriptive statistics in the present study. For statistical calculation Excel Spread Sheet of windows version 7 was used. The results of the present study indicated that there was no consistency in performance of various events in different years. One more note worthy points is that it was observed that the level of ability of the athletes were not same. Thus the quality of movement, level of coordination, speed of skill learning and stabilization of technique became different. Those factors were a direct effect on the performance.

**Key Words :** School level, Athlete, Sub-division.

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### INTRODUCTION

Participation in physical activities develops physical strength, speed of movement, endurance, flexibility and learning of proper movements and its repetition improves co-ordination of movements of the body parts by improving the quality of movements. At the same time it also enhances the knowledge of movement structure of a particular activity. Thus enhanced physical fitness and sense of movement enables a child or young to perform a task in a better way, with ease and grace. Systematic and regular physical activities also help in improving the health standard of the individual because it ensures better functioning of the systems. Again, systematic exercises also develop moral qualities like discipline, obedience, leadership, tolerance etc. which are basic requirements of good citizenship [1-3].

Everyday, somewhere, some one is practicing track and field events. This does not

mean that it is the most popular sports in the world; with the greatest number of participants; this honour probably belongs to the majority of nations in the world. Track and field athletics is considered as number one of all the sports disciplines and it is being carried on all over the world [4].

The teacher's greatest enemy as far as athletics in schools is concerned is time. On the assumption that the sport will usually be on the summer timetable only, there is very little time available to deal with the multifarious activities and events in track and field athletics. This drawback is exacerbated by time lost through bad weather, fire drills, staff meetings and the many other necessary school activities.

For the majority of boys and girls the rules of the governing bodies affecting size and weights of equipment should be completely ignored. The implements used, techniques taught and competitions organized must suit the capabilities of each individual rather than follow the styles and methods of the Olympic Champions [5-6].

### METHODOLOGY

For the present study the performances of 54 boys and 54 girls were recorded. Data were collected from the record book of Bidhan Nagar sub-division sports association of North 24 Parganas of the state of West Bengal. In this study the running events considered were 100 mts., 200 mts. Run, the throwing events included were Shot Put & Javelin and the jumping events considered were Long Jump & High Jump. The performance timing, distance and height of the first three places as recorded in the competition of the year 2010, 2011 and 2012 were gathered for the present study. In running event distance covered in second, in throwing & jumping events the distance/height covered in meters was considered as raw data. Mean and standard deviation were used as descriptive statistics in the present study. For statistical calculation Excel Spread Sheet of windows version 7 was used.

### RESULTS

**Table – 1**

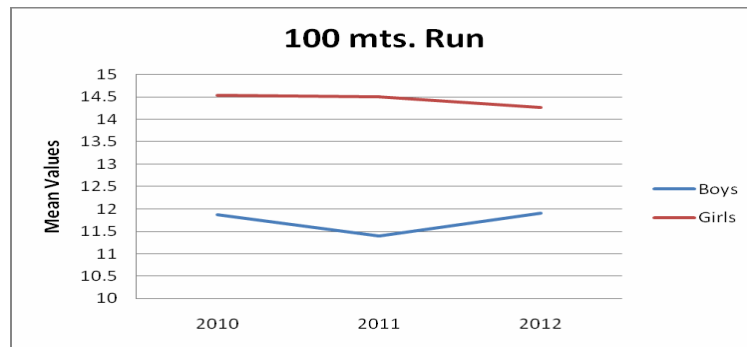
**The mean and S.D of 100 mts. Run of boys and girls for different years**

Events	Sex	Mean & S.D of performance in various years			
			2010	2011	2012
100 mts. Run	Boys	Mean	11.87	11.40	11.90
		S.D.	0.71	0.52	0.10
	Girls	Mean	14.53	14.50	14.27
		S.D.	0.21	0.26	0.31

**Table – 1** indicates that the performance of boys in 100 mts. run was found superior in 2011 than the rest of the years. On the other hand the performance of the girls in the same event was found best in the year 2012. In the **Fig.-1** the performances of 100 mts. run both for boys and girls have shown.

**Fig.-1**

**Performances of 100mts. Run for boys and girls during the year 2010, 2011 and 2012**



**Table – 2**

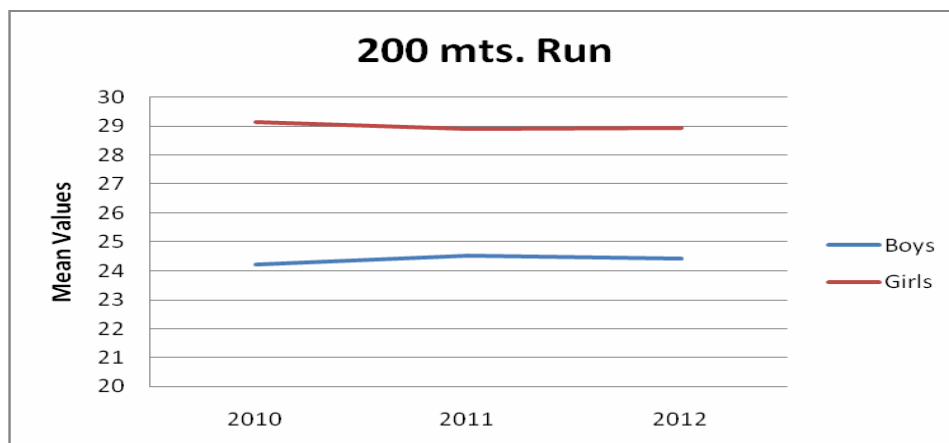
**The mean and SD of 200 mts. Run of boys and girls for different years**

Events	Sex	Mean & SD of performance in various years			
			2010	2011	2012
200 mts. Run	Boys	Mean	24.21	24.51	24.43
		S.D.	0.14	0.49	0.71
	Girls	Mean	29.13	28.90	28.93
		S.D.	0.32	0.10	0.32

**Table – 2** indicates that the performance of boys in 200 mts. run was found superior in 2010 than the rest of the years. On the other hand the performance of the girls in the same event was found best in the year 2011. In the **Fig.-2** the performances of 200 mts. run both for boys and girls have shown.

**Fig.-2**

**Performances of 200mts. Run for boys and girls during the year 2010, 2011 and 2012**



**Table – 3**

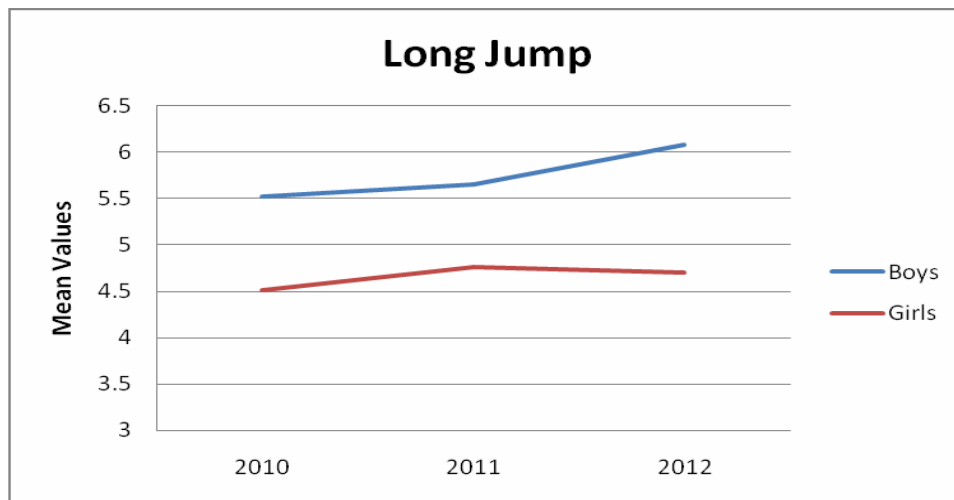
**The mean and SD of Long Jump of boys and girls for different years**

Events	Sex	Mean & SD of performance in various years			
			2010	2011	2012
Long Jump	Boys	Mean	5.52	5.65	6.08
		S.D.	0.31	0.27	0.11
	Girls	Mean	4.51	4.76	4.70
		S.D.	0.15	0.17	0.24

**Table – 3** indicates that the performance of boys in long jump was found superior in 2012 than the rest of the years. On the other hand the performance of the girls in the same event was found best in the year 2011. In the **Fig.-3** the performances of long jump both for boys and girls have shown.

**Fig.-3**

**Performances of Long Jump for boys and girls during the year 2010, 2011 and 2012**



**Table – 4**

**The mean and S.D of high jump of boys and girls for different years**

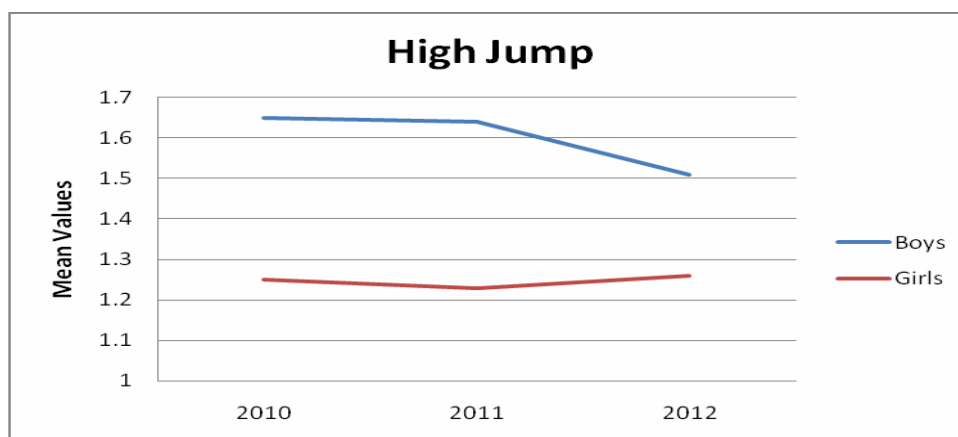
Events	Sex	Mean & SD of performance in various years			
			2010	2011	2012
High Jump	Boys	Mean	1.65	1.64	1.51
		S.D.	0.06	0.03	0.04
	Girls	Mean	1.25	1.23	1.26
		S.D.	0.13	0.08	0.04

**Table – 4** indicates that the performance of boys in high jump was found superior in 2010 than the rest of the years. On the other hand the performance of the girls in the same

event was found best in the year 2012. In the **Fig.-4** the performances of high jump both for boys and girls have shown.

**Fig.-4**

**Performances of High Jump for boys and girls during the year 2010, 2011 and 2012**



**Table – 5**

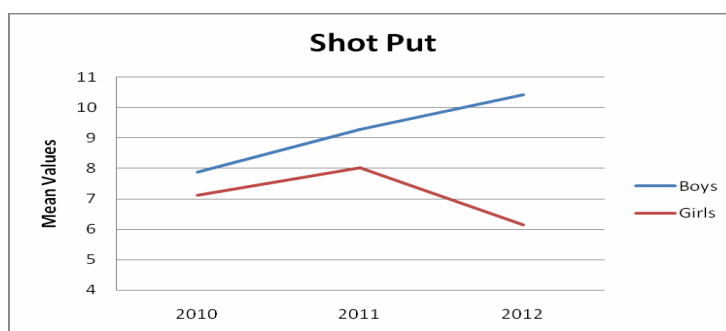
**The mean and SD of Shot Put of boys and girls for different years**

Events	Sex	Mean & SD of performance in various years			
			2010	2011	2012
Shot Put	Boys	Mean	7.89	9.27	10.41
		S.D.	0.09	0.95	1.41
	Girls	Mean	7.13	8.02	6.14
		S.D.	0.85	0.24	0.15

**Table – 5** indicates that the performance of boys in shot put was found superior in 2012 than the rest of the years. On the other hand the performance of the girls in the same event was found best in the year 2011. In the **Fig.-5** the performances of shot put both for boys and girls have shown.

**Fig.-5**

**Performances of Shot Put for boys and girls during the year 2010, 2011 and 2012**



**Table – 6**

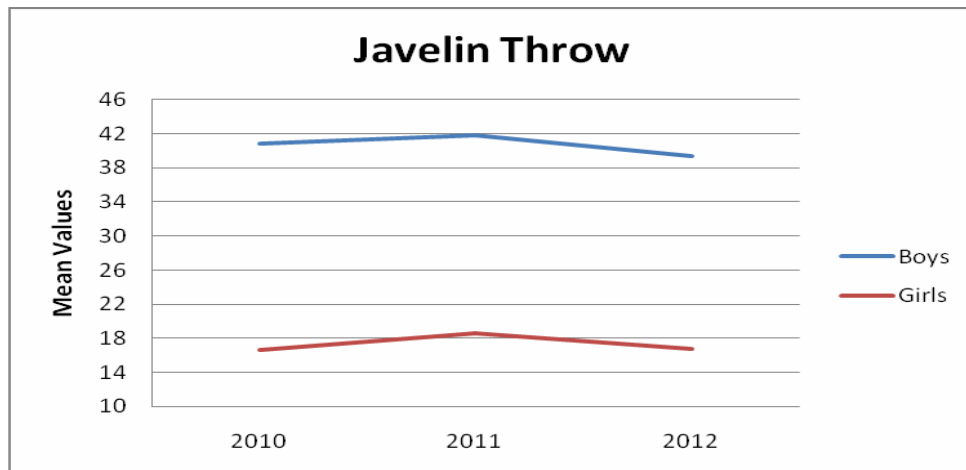
**The mean and SD of Javelin Throw of boys and girls for different years**

Events	Sex	Mean & SD of performance in various years			
			2010	2011	2012
Javelin Throw	Boys	Mean	40.78	41.82	39.37
		S.D.	0.55	0.16	3.10
	Girls	Mean	16.59	18.63	16.82
		S.D.	1.43	0.97	2.24

**Table – 6** indicates that the performance of boys and girls in javelin throw was found superior in 2011 than the rest of the years. In the **Fig.-6** the performances of javelin throw both for boys and girls have shown.

**Fig.-6**

**Performances of Javelin Throw for boys and girls during the year 2010, 2011 and 2012**



## DISCUSSION

The results of the present study indicated that there was no consistency in performance of various events in different years as because the levels of ability of the athletes in different years were different. Their training stage, experience and years of training were also different. They represent the subdivision athletic meet from various zone of Bidhan Nagar subdivision of North 24 paraganas district and most of them were newcomers. The athletes have not wide experience of participation may also be a cause of respective low performance. Performance fluctuation in different years may also happen due to the cause that most of the athletes were participated in the competition without well preparation prior to the meet. Thus the quality of movement, level of coordination, speed of skill learning and stabilization of technique became different. Those factors have a direct effect on the performance.

## CONCLUSIONS

From the obtained results it is concluded that :

1. In 100mts. run, the performance of boys is found superior in 2011 than the rest of the years. On the other hand the performance of the girls in the same event is found best in the year 2012.
2. A consistent upward trend is observed for the girls athletes in three years in 100mts. running events but for boys there is no such trends.
3. In 200mts run, the performance of boys is found superior in 2010 than the rest of the years. On the other hand the performance of the girls in the same event is found best in the year 2011.
4. No consistent upward or downward trends are observed for the boys and girls athletes in three years in 200mts. running events.
5. In Long Jump, the performance of boys is found superior in 2012 than the rest of the years. On the other hand the performance of the girls in the same event is found best in the year 2011.
6. A consistent upward trend is observed for the boys athletes in three years in Long Jump events but for girls there is no such trends.
7. In High Jump, the performance of boys is found superior in 2010 than the rest of the years. On the other hand the performance of the girls in the same event is found best in the year 2012.
8. A consistent downward trend is observed for the boys athletes in three years in High Jump events but for girls there is no such trends.
9. In Shot Put, the performance of boys is found superior in 2012 than the rest of the years. On the other hand the performance of the girls in the same event found best in the year 2011.
10. A consistent upward trend is observed for the boys athletes in three years in High Jump events but for girls there is no such trends.
11. In Javelin Throw, the performance of boys and girls are found superior in 2011 than the rest of the years.
12. No consistent upward or downward trends are observed for the boys and girls athletes in three years in Javelin Throw events.

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